THE REGIONAL ALLIANCE'S TOP 10 WAYS TO USE DATA AS A LEVER FOR CHANGE*

"Data keep the conversation focused on instruction. Wilted lettuce is not what we talk about."

(Sid Bailey, Principal, Washington High School, Glendale, Arizona, interview, 1998)

1. **Data can uncover problems that might otherwise remain invisible.** When data are disaggregated (separated) by student groups, they can be especially helpful. For example, the Providence (Rhode Island) Public Schools took a close look at what mathematics courses they were offering and which students were taking them. When they disaggregated the data by racial groups, they realized that the majority of minority students did not have access to the "gatekeeper" courses of algebra and geometry. The problem suddenly hit them right between the eyes, and they realized they could do something about it.

2. **Data can convince people of the need for change.** Compelling data can stop people in their tracks, break through denial, and motivate change. For example, teachers at an elementary school in California decided to visit the middle and high schools in their district to see how their former students were faring. When they learned that most of their English language learners were forever tracked in special or bilingual education programs, they were motivated to double the amount of time they spent teaching English and to monitor student progress (Bernhardt 1998, 4). In cases like this, data, especially about one's own students, can act as wake-up call, alerting people that "it *is* broke and *does* need to be fixed!" Sometimes, powerful national and international data, such as the results of the Third International Mathematics and Science Study (TIMSS) can have a similar effect.

3. **Data can confirm or discredit assumptions about students and school practices.** Many school practices are based on false premises. Data can help people reexamine their beliefs and change their practices. For example, Glendale (Arizona) Union High School District, like many across the country, offered low-achieving students an array of remedial mathematics courses because they assumed these students would fail in more challenging courses. One high school in the district decided to test that assumption. They eliminated remedial mathematics and enrolled "low-track" students in a challenging algebra course while providing them with additional support. Not only did these students

avoid failure, but they performed better than they had in remedial mathematics. The data convinced the district to eliminate tracking thoroughly and permanently.

4. **Data can get to the root cause of problems, pinpoint areas where change is most needed, and guide resource allocation.** For years, teachers and administrators at a school district in northern California watched 95 percent of their graduates drop out of college. They assumed that the problem was the students' lack of social skills and undertook a school reform effort to develop these skills. Only after teachers conducted a survey of graduates did they learn the real cause: students' poor writing skills. This information prevented them from spending thousands of dollars solving the wrong problem (Bernhardt 1998, 2).

5. **Data can help schools evaluate program effectiveness and keep the focus on student learning results.** Under constant pressure from inside and out, schools are prone to jump on the newest bandwagon without being clear why they are doing a program and what results they hope to achieve. Before things settle down, the program is gone and another one is under way, and no one knows if students actually benefited. But if schools have effective ways of tracking student learning, they can take action with the goal of improving specific learning outcomes, monitor results, and evaluate programs. And they don't have to rely on outside evaluators. The Hudson (Massachusetts) Public Schools are taking this approach as they implement their new elementary mathematics program. They piloted the program in a few classrooms. Then by tracking student achievement and surveying teachers, they decided to expand the program based on positive results.

6. **Data can provide the feedback teachers and administrators need to keep going and stay on course.** One surefire recipe for burnout is being in the dark about the consequences of your actions. Data about results can energize and empower staff. For example, fourth-grade teachers at Holaway Elementary School in Tucson, Arizona, use a rubric to test their students' mathematics problem-solving skills four times a year. When scores go up, they celebrate and continue doing what is working. When scores go down, they brainstorm new strategies.

7. **Data can prevent overreliance on standardized test scores.** Standardized test scores are often the only data schools pay much attention to. But they provide only one view of a school's success or

"Effective use of data helps schools develop site-based capacity to evaluate the effects of policies, programs, and practices on student performance. They don't have to rely on outside evaluators to answer these questions."

(Martha Williams, Vice President, CRM, Inc., South Hampton, New Hampshire, interview, 1998)

failure. Without other good data—performance assessments, disaggregated results, mathematics/science enrollment figures, or information about classroom practice—schools can be baffled by standardized test score fluctuations, devastated by poor results, or lured into a false sense of security with high scores.

8. **Data can prevent one-size-fits-all and quick-fix solutions.** In a rush to "do" something, schools may latch onto popular or simplistic solutions to resolve complex problems. Data help school staff dig deeper, consider the local context, and more fully understand a problem before jumping into action. The solution is more likely to be on target for the particular situation. For example, buying hands-on science kits for elementary teachers may not be the answer to improving science instruction. While good materials are necessary, they won't help if teachers don't feel comfortable with the science content or classroom inquiry. In this case, understanding and addressing teachers' professional development needs will do more to improve instruction than an infusion of materials.

9. **Data can give schools the ability to respond to accountability questions.** More and more, schools are under fire to produce results and be accountable to organizations that provide them with grants and to the community at large. The standards movement has upped the ante. As schools commit themselves to high levels of learning for all students, they need effective ways to assess and communicate about student learning; in other words, they need data. Good examples of data for this purpose are the school reports being used in Vermont. They provide the community with data about school performance, including results on SATs, Advanced Placement Tests, and Vermont's New Standards Assessments. (For further information, access http://crs.uvm.edu.)

10. **Data can help build a culture of inquiry and continuous improvement.** Data don't change schools, people do—people who are committed to working together and doing whatever it takes to improve learning. But they need to be armed with good data if they are going to uncover and understand problems, test the best solutions, and learn as they go. Data use and inquiry are inseparable companions on the road to reform and hallmarks of the most successful schools.

> *"From a teacher's perspective, we get excellent diagnostic information on individual students. I can look at how each student performed on each outcome so I can focus improvement on each individual student."*
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> (Teacher, Holaway Elementary School, Tucson, Arizona, interview, 1998)

Reference: Bernhardt, V. L. (1998). *Data analysis for comprehensive schoolwide improvement.* Larchmont, NY: Eye on Education.